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U.S. PATENT DOCUMENTS

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	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>5838323</u>	November 1998	Rose et al.	345/349
<input type="checkbox"/>	<u>5918240</u>	June 1999	Kupiec et al.	707/531
<input type="checkbox"/>	<u>5924108</u>	July 1999	Fein et al.	707/531
<input type="checkbox"/>	<u>5963940</u>	October 1999	Liddy et al.	707/5
<input type="checkbox"/>	<u>5983216</u>	November 1999	Kirsch et al.	707/2

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ABSTRACT:

A document summarization apparatus or method summarizes an electronic document written in a natural language, and generates an appropriate summary depending on user's focus and user's knowledge. The document summarization apparatus according to the present invention includes, for example, a focused information relevant portion extraction unit, a summary readability improvement unit, and a summary generation unit. The focused information relevant portion extraction unit extracts a portion related to two types of focused information in a document to be summarized based on the two types of focused information, that is, user-focused information as information focused by a user who uses a summary, and author-focused information as information emphasized by an author of the document to be summarized. In the document to be summarized, the summary readability improvement unit distinguishes user known information already known to a user, and information known through an access log regarded as already known to a user based on a document previously presented to the user when a summary is generated, from other information than these two types of information, and selects an important portion in the document to be summarized. The summary generation unit generates the summary of the document to be summarized based on the selection result of the summary readability improvement unit. Thus, a summary can be generated with both user-focused information and author-focused information can be included depending on the knowledge level of a user.

29 Claims, 33 Drawing figures

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